

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1 – 9 (cancelled).

10 (currently amended). A voice and musical tone coding apparatus, comprising:

a ~~an~~ quadrature transformation processing section that converts a voice and musical tone signal from a time component to a frequency component;

an auditory masking characteristic value calculation section that finds an auditory masking characteristic value from said voice and musical tone signal; and

a vector quantization section that, when one of said voice and musical tone signal frequency component and elements of [[said]] code vector is within an auditory masking area indicated by said auditory masking characteristic value, performs vector quantization changing a calculation method of a distance between said voice and musical tone signal frequency component and said elements of code vector based on said auditory masking characteristic value.

11 (currently amended). A voice and musical tone coding apparatus, comprising:

a quadrature transformation processing section that converts a voice and musical tone signal from a time component to a frequency component;

an auditory masking characteristic value calculation section that finds an auditory masking characteristic value from said voice and musical tone signal; and

a vector quantization section that, when codes of said voice and musical tone signal frequency component and elements of [[said]] code vector differ, and ~~codes of~~ said voice and musical tone signal frequency component and said elements of code vector are outside an auditory masking area indicated by said auditory masking characteristic value, performs vector quantization changing a calculation method of a distance between said voice and musical tone signal frequency component and said elements of code vector based on said auditory masking characteristic value.

12 (currently amended). A voice and musical tone coding method, comprising:

~~a quadrature transformation processing step~~ of converting a voice and musical tone signal from a time component to a frequency component;

~~an auditory masking characteristic value calculation step~~ of finding an auditory masking characteristic value from said voice and musical tone signal; and

~~a vector quantization step of, when one of said voice and musical tone signal frequency component and said code vector is within an auditory masking area indicated by said auditory masking characteristic value, performing a vector quantization changing to change~~ a calculation method of a distance between said voice and musical tone signal frequency component and [[said]] elements of code vector based on said auditory masking characteristic value, when one of said voice and musical tone signal frequency component and said elements of code vector is within an auditory masking area indicated by said auditory masking characteristic value.

13 (currently amended). A voice and musical tone coding method, comprising:

~~a quadrature transformation processing step~~ of converting a voice and musical tone signal

from a time component to a frequency component;

~~an auditory masking characteristic value calculation step of finding an auditory masking characteristic value from said voice and musical tone signal; and~~

~~performing a vector quantization to change a calculation method of a distance between said voice and musical tone signal frequency component and elements of code vector based on said auditory masking characteristic value a vector quantization step of~~, when codes of said voice and musical tone signal frequency component and said elements of code vector differ, and ~~codes of~~ said voice and musical tone signal frequency component and said elements of code vector are outside an auditory masking area indicated by said auditory masking characteristic value, ~~performing vector quantization changing a calculation method of a distance between said voice and musical tone signal frequency component and said code vector based on said auditory masking characteristic value .~~

14 (currently amended). A voice and musical tone coding program ~~that causes~~ stored on a computer to function as readable medium for execution by a computer, comprising:

a quadrature transformation processing section that converts a voice and musical tone signal from a time component to a frequency component;

an auditory masking characteristic value calculation section that finds an auditory masking characteristic value from said voice and musical tone signal; and

a vector quantization section that, when one of said voice and musical tone signal frequency component and [[said]] elements of code vector is within an auditory masking area indicated by said auditory masking characteristic value, performs vector quantization changing a calculation method of a distance between said voice and musical tone signal frequency

component and said elements of code vector based on said auditory masking characteristic value.

15 (currently amended). A voice and musical tone coding program ~~stored on that causes~~
a computer ~~to function as~~ readable medium for execution by a computer, comprising:

 a quadrature transformation processing section that converts a voice and musical tone
signal from a time component to a frequency component;

 an auditory masking characteristic value calculation section that finds an auditory
masking characteristic value from said voice and musical tone signal; and

 [[and]] a vector quantization section that, when codes of said voice and musical tone
signal frequency component and [[said]] elements of code vector differ, and ~~codes of~~ said voice
and musical tone signal frequency component and said elements of code vector are outside an
auditory masking area indicated by said auditory masking characteristic value, performs vector
quantization ~~changing to change~~ a calculation method of a distance between said voice and
musical tone signal frequency component and said elements of code vector based on said
auditory masking characteristic value.